

**UNITED STATES PATENT APPLICATION**

**OF**

**RICK BOWDEN**

**FOR**

**SYSTEM AND METHOD FOR FORECASTING MATERIAL REQUIREMENTS AND  
MANAGING THE ACCESSABILITY OF THE MATERIALS**

## **BACKGROUND OF THE INVENTION**

### **Field of the Invention**

[0001] The present invention relates to a method and a system for forecasting materials requirements and managing the accessibility of those materials. The system comprises two major system components, a customer developed inventory and sales management system and a third party accounting system. The two components can reside on different hardware and operating systems, but are interfaced permitting transactions of one of the components to be reflected in the other. The method and system also make use of business analysis and planning tools. These tools provide management with the flexibility of analyzing information relationships quickly and with less dependence upon traditional programmer developed reports. Standard production reports are available for covering the more routine requirements.

### **Background of the Invention**

[0002] Historically, companies have employed a largely manual file based system to manage the procurement, handling and distribution of oil field country tubular goods materials (OCTG). A new trend in outsourcing of inventory procurement and handling is beginning to develop in the oil industry. As the OCTG activity levels increases, it becomes increasingly more difficult to maintain an effective control of the materials management process.

[0003] In light of the above, there is a need in the art for a method and a system that provides an effective control of the management process of sales and materials for oil field country

tubular goods. Therefore, the present Tubular Information Management System (TIMS) has been developed.

## **SUMMARY OF THE INVENTION**

[0004] Accordingly, the invention is directed to a method and a system for forecasting material requirements and managing the accessibility of those materials utilizing parameters and processes used in the oil country tubular goods business. Therefore, the present invention substantially obviates one or more of the problems due to the limitations of the related art.

[0005] Effective OCTG material management requires a number of factors not common to the supply chain management. For example, prior consumption based models for OCTG are not accurate indicators of current and future requirements. Therefore, the present invention provides a consumer/distributor forecasting model based upon customer planned drilling schedules. The reality of oil/gas drilling practices is that initial plans are based upon imprecise knowledge of potential hydrocarbon reservoirs. As the drilling activities progress, there is increasing certainty as to materials needs. Consequently, a design criteria for the Tubular Information Management System (TIMS) is the creation of initial materials requirements as are indicated by the initial drilling forecasts. Inventory materials are allocated to these requirements so that needs are guaranteed by influencing supplier production schedules. Accordingly TIMS supports forecasted allocations.

[0006] Moreover, the progressive certainty as to material requirements as a function of drilling operations within the scope of the original plans requires a feedback mechanism to adjust initial